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ing. Ambrogio Noé

Rapallo , 17 aprile 2026

Spett.le
Ministero dell'Ambiente e della
Sicurezza Energetica
Via Cristoforo Colombo , 44
'00147 Roma RM

Ogg. : procedura di valutazione impatto ambientale 14476
Osservazione n. A 1) 30 marzo maggiori dettagli su mini centrale nuclare

DATACENTER AWS EUROPE A ZIBIDO SAN GIACOMO

Codice procedura 14476

Codice istanza online VIA100000138

Al fine di rendere più concreta e gestibile la soluzione mini centrale nucleare (punto n.A1 del 30 marzo) lo scrivente propone di considerare n. 2 mini reattori nucleari da installare in parallelo mod.XE-100 in grado di garantire una potenza complessiva di 160 MW , prodotti dalla società Xenergy inc. controllata e/o partecipata dalla soc. Amazon dei quali allega un scheda sintetica.

Ricordato che il progetto oggetto della procedura 14476 prevede una potenza di 138 – 150 MW la soluzione proposta fornirà una potenza di 160 MW grazie a due minireattori nucleari abbinati.

Xenergy Inc. é una società partecipata e/o controllata da Amazon e sta per essere quotata alla borsa americana. Ha sede centrale a Rockville nel Maryland e direzione europea in UK

Obiettivo di Xenergy é produrre mini reattori nuclari caratterizzati dalla semplicità di utilizzo , semplicità di installazione , sicurezza e affidabilità.

Ogni reattore della serie XE-100 ha una potenza di 80 MW ed é facilmente scalabile installando più mini reattori in parallelo , fino ad un massimo di 4 reattori. Nel caso specifico n.2 reattori per una potenza complessiva di 160 MW.

I reattori saranno installabili entro circa 3 anni , quindi in tempi compatibili con il progetto.

Lo scrivente non ha nessun interesse commerciale specifico , ma propone di approfondire questa soluzione concreta , essendo reale e fattibile e a tal fine allega scheda del mini reattore XE-100.

Distinti saluti

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What is the XE-100 reactor?

The XE-100 reactor is a small modular nuclear reactor developed by X-energy. It is base
Gas-cooled Reactor (HTGR) technology. X-energy's nuclear technology represents the
safe, reliable, and zero-carbon nuclear energy.

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Inside the XE-100

The XE-100 converts nuclear energy into electricity or industrial steam through a defined sequence governed by material behavior and core physics. TRISO-X fuel, a high-temperature graphite core, and inert helium coolant are designed to operate together through predictable physical principles to produce cleaner, safer, and more reliable energy.

Each element of the system is engineered around inherent safety characteristics and high-temperature performance. Rather than relying on layers of complex mechanical systems, the XE-100 is designed to use durable, proven materials, passive safety features, and innovative design principles to deliver both electricity and industrial-grade steam from a single standardized reactor design.

What is the power output of the XE-100 reactor?

The XE-100 advanced small modular reactor is designed to produce 80 MW of electric
However, it can be scaled up into a 'four-pack' configuration, allowing for a total power c

What is the transportation method for XE-100 reactors?

The XE-100 reactor's modular design allows for road delivery of components, enabling
road and rail infrastructure. This approach enhances scalability, control over timelines, a

What are the key safety features of the XE-100 reactor?

The XE-100 is designed to be intrinsically safe. With only four operator-controlled varial circulator, feedwater pump, and turbine throttle valve), opportunities for operator error a automated operations allow for fewer personnel on site. Additionally, TRISO-X fuel is de withstand extreme temperatures.

What is the operational life of the XE-100 reactor?

The XE-100 reactor is designed for a 60-year operational life, ensuring long-term susta

What is the fuel used in the XE-100 reactor?

Our reactors use TRISO particle fuel, a technology that has been developed and impro describes TRISO particles as the most robust nuclear fuel on the planet. We manufact TRISO fuel, TRISO-X, through our wholly owned subsidiary, TRISO-X, LLC, to ensure s

What qualifications and experience does the X-energy design team have?

Our design and engineering team brings decades of experience from the HTGR pebble Germany and South Africa, combined with veterans of the Next Generation Nuclear Pla States and leading experts from the DOE National Laboratories.

Does the XE-100 reactor support load following?

Yes, the XE-100 has load-following capabilities, and is designed to ramp up or ramp do power in 12 minutes, faster than what is achievable by existing Generation III nuclear te a versatile design that can be applied to several end markets, as well as to convention

X-energy Headquarters

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